



TO: Mayor Matti Herrera Bower and Members of the City Commission

FROM: Kathie G. Brooks, Interim City Manager

DATE: December 11, 2012

SUBJECT: **MASS TRANSIT LOOP – NORTH-MIDDLE BEACH TRANSIT CIRCULATOR STUDY**

The purpose of this Letter to Commission is to provide an update on the ongoing North-Middle Beach Transit Circulator (DecoBus) Study since the Finance and Citywide Projects (FCWP) Committee meeting held on July 10, 2012 wherein this item was discussed. At that meeting, staff presented alternatives for a North-Middle Beach Circulator. Further, the Interim City Manager explained that fifty percent of the amount of Quality of Life (QOL) funds earned are committed to the payment of a portion of the debt service on the Miami Beach Redevelopment Agency - City Center/Historic Convention Village Bonds, which are used for the development, improvement and construction of certain public areas including a portion of the Cultural Center facilities located within the City Center District. The remaining fifty percent is allocated equally among North Beach, Middle Beach, and South Beach for capital projects that enhance Miami Beach's tourist related areas and various arts and cultural programs. The Interim City Manager then stated that instead of 4 categories, the 50% of QOL funds could be broken into 5 categories, where transit would be the 5th category. Once the project is fully developed, the QOL funding described above can be used to sustain the capital and operating expenses for a North-Middle Beach Transit Circulator. The FCWP Committee requested that City staff complete the research on bus ridership in Middle and North Beach and referred the item to the Neighborhoods/Community Affairs Committee (NCAC).

The City's proposed circulator service would: 1) provide enhanced customized transit service between a high-density residential corridor (Collins Avenue) and commercial districts (71st Street and 41st Street) (Attachment A); and 2) customize, or brand, the service to a unique market of non-captive riders and non-work trips via a direct one-seat connection between North Beach and Middle Beach to South Beach. Such a connection is not currently offered by Miami-Dade Transit (MDT). On the MDT system, a transfer to the western portions of 71st Street or 41st Street would require an extended walk or a transfer to other MDT routes. Lastly, pursuant to the request from the FCWP Committee in July, the circulator service would serve senior and low income residents by serving the Stella Maris facility located at 87th Street and the Four Freedoms facility located at 38th Street (Attachment B and C).

From an operations and maintenance perspective, the feasibility report evaluated three potential alternative pricing/financing scenarios:

1. MDT operates the service (assuming same MDT/City cost share as the South Beach Local)
2. Miami Beach operates the service
3. Turnkey operation by private vendor (operator provides vehicles, fuel, drivers, maintenance, and insurance)

On September 10, 2012, this item was presented to the Transportation and Parking Committee (TPC) and a discussion ensued regarding the draft feasibility report prepared by Gannett Fleming and Associates. The TPC passed a motion encouraging the City to use any funds available to strengthen the current bus service with MDT; and, should this project move forward, requesting that the service be tied into the current MDT bus system, eliminating stops and shortening the headways. Furthermore, the TPC opined that the City should not be in the business of operating a bus system.

LTC - Mass Transit Loop – North-Middle Beach Transit Circulator Study

Subsequently, on September 14, 2012, City staff met with MDT to discuss the proposed circulator service for North-Middle Beach and how the City's and County's bus operations could collaborate to avoid any duplication of service. Overall, MDT believed that the Collins Avenue corridor is currently well-served by its bus system and that the City's proposed circulator could potentially take ridership from the MDT system. MDT noted that it would not operate any unique (or branded) vehicles along the Collins Avenue corridor but could wrap the existing fleet. It is important to note that most of the MDT bus routes operating in Miami Beach, with the exception of the South Beach Local and Route 115/117, extend well beyond the Miami Beach municipal limits, serving municipalities to the north and west on the mainland. Concerns over driver courtesy and bus cleanliness would probably not be uniquely addressed by MDT. Further, if MDT operated the circulator, it would not be possible to restrict the use of the buses to residents or choice riders and differential pricing for residents would not be possible. Improved coordination of the multiple routes along A1A/Collins Avenue would not be possible given the many considerations that go into scheduling. However, MDT would likely scale back existing service along Collins Avenue should the City move forward with a circulator service. Lastly, MDT advised of a proposed service change reflected in the County's 2013 – 2022 Transit Development Plan (TDP) to restructure Routes 115/117. Per the TDP, Route 115 would be restructured into a Mid-Beach Circulator and Route 117 would be restructured into a North Beach Circulator. The MDT service change is proposed to take effect in Fiscal Year 2014.

On October 30, 2012, during a general discussion on North Beach issues, the City's Planning Board strongly supported efforts to increase the availability of transit options in the North Beach area and passed a Resolution urging the City Commission to refer to the Land Use and Development Committee a discussion item on transportation options in the North Beach Area, including a circulator bus for North Beach and better connector options for South, Middle, and North Beach. The Planning Board referred the item for discussion at the Land Use Development Committee meeting on December 19th.

NEXT STEPS

At this time, City staff continues to work with its consultant and MDT to develop a service plan for a North-Middle Beach Circulator that is feasible, meets the City's service objectives, and complements MDT bus service. Further, City staff will work closely with MDT particularly in regards to a potentially restructured Route 115/117. MDT implements service changes to its bus system twice a year, in summer and fall; therefore, it is crucial that any bus service changes in the North-Middle Beach communities are closely coordinated between the City and County in order to implement an effective bus service that meets the objectives of this study and the mobility needs of the community.

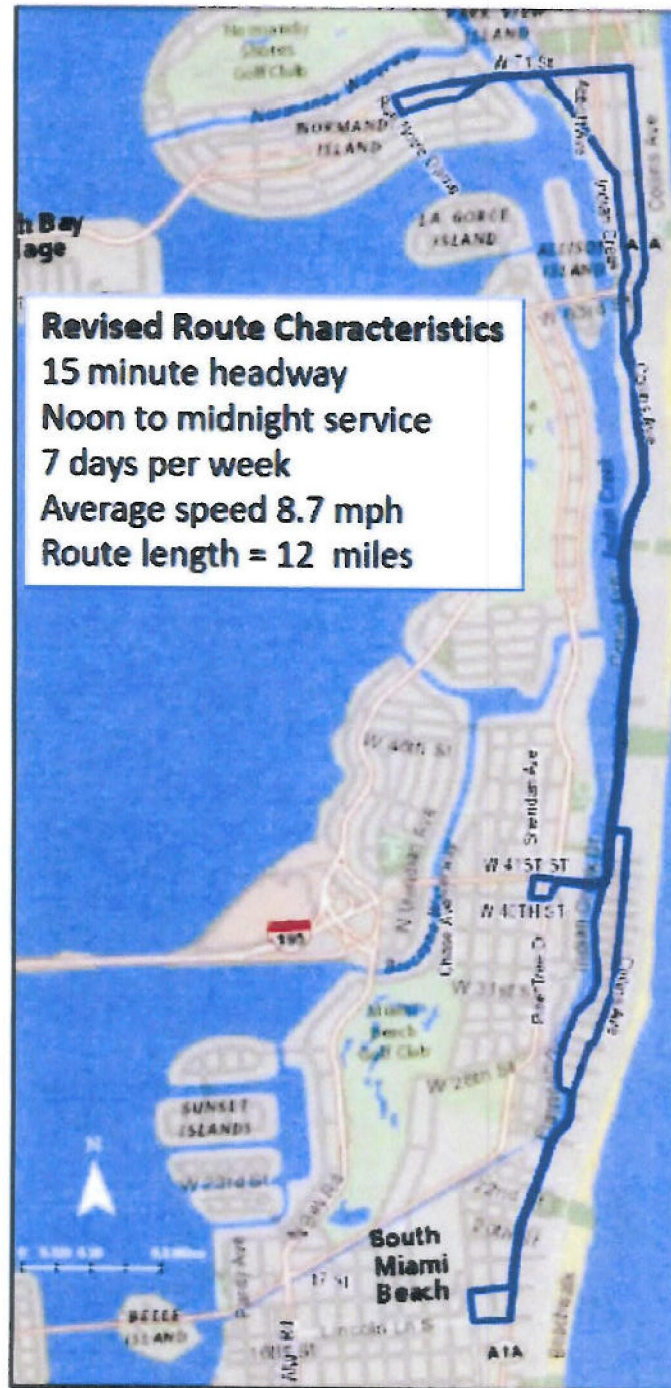
As recommended by the FCWP Committee, City staff has completed the research on bus ridership in Middle and North Beach and the item will be taken to the Neighborhoods/Community Affairs Committee (NCAC) in early 2013. Following the NCAC discussion, City staff will take the item to the FCWP Committee for financial discussion and further direction.

Please feel free to contact me if you have any questions or concerns.

Attachments:

- A: North-Middle Beach Transit Circulator Route
- B: Ridership Estimate for North-Middle Beach Circulator
- C: Comparison of DecoBus Service vs. Existing MDT Operations for A1A Corridor

KGB/JGG/FHB/JJF/RWS/JRG



Proposed Route

Ridership Estimate for North-Middle Beach Transit Study

Ridership for the North-Middle Beach Transit Service (DecoBus) was estimated based upon that of the South Beach Local (SBL), which serves a comparable geographic area and offers similar service characteristics. Both services operate over a route length of approximately 10 miles (the DecoBus route is 12 miles) and have comparable headways (10 minutes for SBL, 15 minutes for DecoBus).

The characteristics for both services are summarized in the table below.

Table 1- Estimate of DecoBus Ridership

Row	Route Characteristic	DecoBus	SBL
1	Population within 1/2-mile of Route	41,522	39,490
2	Population within 1/2-mile of DecoBus Route across Indian Creek	6,490	-
3	Net Population within 1/2-mile of DecoBus Route	35,032	39,490
4	DecoBus Runs per day	96	123
5	Headway (minutes)	15	10
6	# of Stops	27	84
7	Stops spacing (feet)	2,327	628
8	Route Length (feet))	62,828	52,755
9	Average walk distance (0.25 miles + 1/2 stop spacing)	2,483	1,634
10	Average walk time (3.5 ft/sec) (minutes)	12	8
11	Average bus speed (mph)	9.50	15.70
12	Average wait time (min)	7.50	4.88
13	3 times wait time + travel time (5 mile trip)	23	15
14	Span of service (hours)	12	20
15	Reduction for span of service (1/2 difference)	80.00%	
16	Reduction for trip time	88.35%	
17	Reduction for population (ratio of potential market)	88.71%	
18	Average Annual Ridership	967,673	1,543,379

Rows 1 through 3 address the resident population of the two service areas. Because DecoBus runs adjacent to Indian Creek over several miles, the area west of the creek should not be considered part of the service area for that route and the population is subtracted from the calculation.

Rows 4 through 8 summarize the physical characteristics of the two routes. The DecoBus route is longer than the SBL and stop spacing is greater. Consequently, the average walk distance to a DecoBus stop is expected to be approximately 50 percent greater than for a walk to a SBL stop (Rows 10 and 11). The headway for DecoBus is also 50 percent greater than for the SBL. Noting that wait time is typically perceived as having three times the impact on riders as travel time, and using a five-mile trip as the typical trip length on either service, the DecoBus trip will take about 50 percent longer than the SBL trip. The average bus travel speeds are also faster on the SBL than the DecoBus.

It is also noted that the SBL operates approximately 20 hours per day while DecoBus is planned for 12 hours per day.

Rows 15 through 18 are the factors that have been applied to the SBL ridership to generate DecoBus ridership. Based upon the 1.5 million annual passengers on the SBL (May 2011-April 2012) DecoBus can be expected to generate approximately 970,000 riders a year, assuming a comparable fare of \$0.25 per rider. The resulting revenue would be \$242,500/ year.

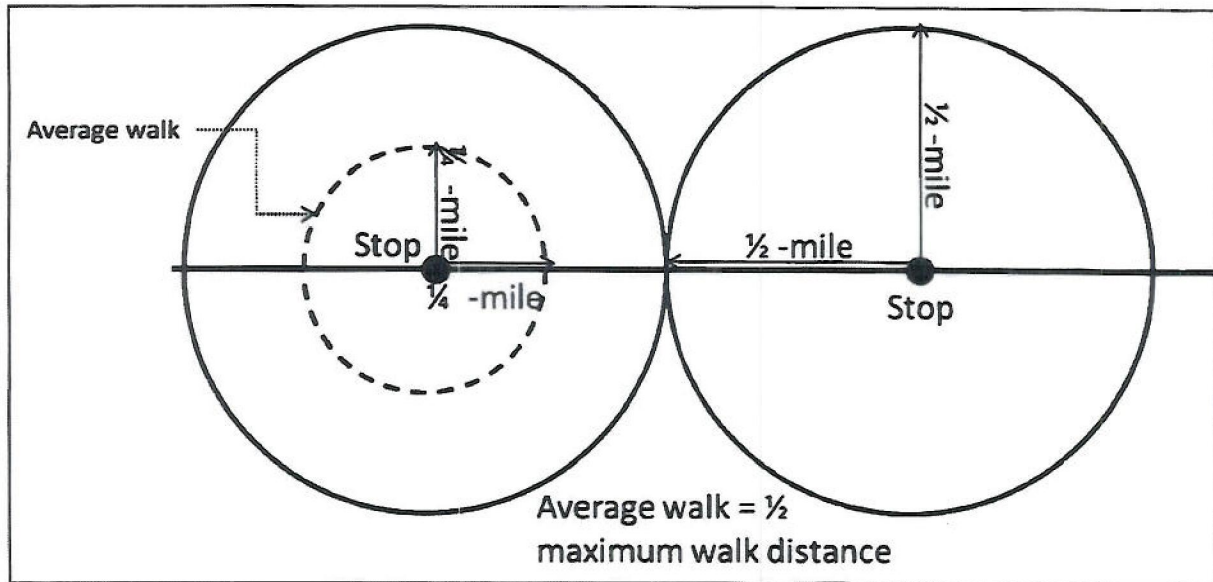


Figure 1- Calculation of Average Walk Distance

Comparison of DecoBus Service vs. Existing MDT Operations for A1A Corridor

Objective	DecoBus	MDT Routes L/S/120
Direct service between high-density residential corridor and commercial districts (fewer transfers)	Direct connection to 17 th , 41 st , and 71 st Streets from A1A (17 th to 88 th Streets)	Connects A1A to easternmost intersection of 17 th and 41 st Streets. L operates on 10-minute peak period headways along 71 st Street. Travel to western portions of 17 th and 41 st Streets require a walk or a transfer to other MDT service.
Service focused on Intra-City travel (no crossing of Causeway to mainland)	Route operates solely within Miami Beach	L, S, and 120 would serve the A1A corridor within the City and also extend beyond the City boundaries at the north and south end of the runs.
Frequent Service (including weekends)	15-minute headways	Peak period headways of 4 minutes on average, less north of 71 st Street and along 71 st Street. Frequency drops to approximately every 7.5 minutes on weekday evenings and less on weekends.
Reliable Service	Traffic improvements and Traffic Signal Priority along with GSP technology would reduce variability in schedule. Passenger information systems would advise riders of status of buses.	Schedule results in considerable variation in bus arrivals. Traffic delays further result in less reliable service.
Customized to Unique Market of Non-Captive Riders and Non-Work Trips	Customized vehicles would offer a higher quality travel experience. Half-mile stop spacing would reduce in-vehicle travel time for trips within the corridor.	S and L service are conventional bus transit with frequent stops and few passenger amenities. 120 offers less frequent stopping and therefore a more rapid trip.
Ability to Tailor Service to Demand	As a City-sponsored service, adjustments could be made in response to demand and seasonally. Passenger information systems could keep passengers informed of service changes	Standard process for modifying service.
Serve Senior and Low-Income Residents	Route passes Stella Maris senior facility on 87 th Street and HUD housing at Four Freedoms at 38 th Street.	L, S, and 120 pass Four Freedoms HUD housing. Two routes pass Stella Maris senior facility.

Objective	DecoBus	MDT Routes L/S/120
Cost	Fare anticipated at no more than \$0.25/trip	Current full fare is \$2.00/trip.
Operational control	Service and changes to service entirely under City's control	Service changes subject to County-wide considerations and funding
Potential to attract new customers	Greater potential with "new" service	None
Vehicles	Unique branding, customized to the market	Standard transit vehicle
Customer service	Drivers trained to respond to passenger/visitor questions and serve as an ambassador for the City	Traditional route and fare information